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ABSTRACT

Elementary school boys and girls are highly similar with regards to the events they describe as emotionally arousing fear, sadness, anger, happiness, and pride. One hundred and sixty (160) White, Black, Chicano, and Asian-American boys and girls from kindergarten, second, third, fourth, and sixth grades freely described the situation that most strongly aroused each of these five emotions. Verbatim responses about situations were categorized in a specially devised coding system along four major dimensions: initiating agent, the social context, the personal resources gained or lost, and the specific need threatened or satisfied in the emotion arousing event. Although significant developmental and inter-emotional differences were found, only limited sex differences were obtained. In general, girls more than boys experienced critical emotional experiences in family and social contexts, while boys were more self-oriented, manifesting greater preoccupations with possessions, competence, and autonomy. These limited sex differences, found within a wider context of similarity, were interpreted in the context of Bakan's communal/agency distinction. Each emotion studied reflected different configurations among the four dimensions analyzed, suggesting unique developmental patterns of emergence for the separate emotions. (Author)

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Sex Differences in Children's Reports of Emotion-Arousing Situations

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Paper presented in Diane McGuinnes (Chair), Sex differences: Comotion, motion, or emotion: Psychological gender differences. Symposium presented at the meeting of the Western Psychological Association, San Francisco, April 19-22, 1978.

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Sex Differences in Children's Reports of Emotion-Arousing Situations[1]

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The survey of situations having emotional impact for children (N. Feshbach, Powell, Hoffman, Last, Note 1), the focus of our presentation this morning, was carried out within the context of a wider field study currently being conducted in several Los Angeles schools. In the field study, children are being trained to develop empathic skills for the purpose of regulating aggression and anti-social behaviors and fostering pro-social values and behaviors. This investigation is part of a broader training program co-directed by Seymour Feshbach and myself in which training procedures and curricula are being developed for use with children in the middle elementary grades (Feshbach & Feshbach, Note 2). The major purpose of the training procedures and the project is to foster personal growth in the children while enhancing the development of positive social behaviors.

An adequate presentation of the rationale, design, and evaluation of the Empathy Training Project would be too extensive to be presented here (N. Feshbach, Note 3). For the purposes of this presentation, it is important to note that the task of measure selection and development

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[1]Paper presented in Diane McGuinnes (Chair), Sex differences: Comotion, motion, or emotion: Psychological gender differences. Symposium presented at the meeting of the Western Psychological Association, San Francisco, April 19-22, 1978.

was of critical importance to the project and eventually entailed the use of three different sets of measures. The first set was designed to assess the dynamics of the training process itself, the second set was included to assess the program's effects on the children's level of aggression, pro-social behavior, and achievement skills. The third set of measures was designed to provide information on the 10-week training program effects on the mediating processes of empathy and social understanding. This third set of measures included an Affective Matching Test, an Emotional Responsiveness Measure, an Audio-Video Empathy Measure, and a Role-Taking Measure. Each of the measures evolved from the conceptual model of empathy underlying the training program. The content of these new sets of empathy-related measures required a knowledge of common emotional experiences that would be age, sex, ethnic group, and social class appropriate. It was the need for this information that propelled us into conducting a separate study investigating situations that have emotional impact for children. It is the data from this second study, or the study within a study, that we are reporting today.

Method

Sample

Our sample consisted of 160 boys and girls attending kindergarten, second, third, fourth, and sixth grades in four different schools located in lower-middle- to middle-middle-class neighborhoods. It included an equal number of children from Anglo, Asian-American, Black, and Chicano ethnic groups.

Procedures

The children at all grade levels were interviewed with respect to the following five emotions: happiness, pride, anger, sadness, and

fear. Additional protocols were obtained but as of yet have not been analyzed for embarrassment, surprise, and disgust. Before each interview proper, a child's comprehension of the task requirement was ascertained. Then the child was asked to recount an actual experience which had elicited each of the targeted emotions. The interviews, which were open ended, ranged between 25 and 45 minutes. Certain predetermined probes were allowed. The interviewers recorded the children's responses verbatim.

The order in which the emotional situations were elicited was counterbalanced through a Latin square design.

Categorization of Data

Since a major objective of the study was to portray the richness of the emotionally arousing events identified by the children, the selection of a categorization method that could reflect the breadth and depth of these events in clear detail became a central methodological concern. Previous researchers (Jersild, et al., 1933; Lewis, et al., 1972) have tended to categorize affective responses into braod thematic groupings. In one of the studies on fear, for instance, responses were classified into such thematic categories as: animals, fears for personal safety, frightening home events, and disturbing school events (Croake & Knox, 1973). In the process, such distinct events as separation from parents and fights between siblings were reduced into the same classification: home events. One of the drawbacks of these broad categories is their inability to convey the complexity or texture of the original responses.

In light of our concern for descriptive depth as well as breadth, an alternative method for classification was developed, a method which evolved from our observation that the children's descriptions of

emotionally arousing situations took the form of a "story in a sentence." In relating a past event, the child would spontaneously tell a complete story replete with actors, plot, and context in a single extended sentence.

Close attention to the responses indicated a high degree of structural similarity in the story sentence used by the children in their descriptions. The prototypical story sentence dealt with a transaction between an agent and a subject over a resource. For example, a frequent happy response was, "I was happy when my parents gave me a bike." In this transaction, the parental agent gave the child a physical resource--a bike.

In distinction to the positive transaction between agent and subject in happiness and pride, sadness, anger, and fear involved negative transactions in which the agent took or negated the subject's resources. An anger response, for example, was: "I was angry when my brother hit me." Here the sibling agent reduced the child's resource of wellbeing.

Although the transactional valence differed between emotions, all the emotional responses shared a prototypical sentence structure in which an agent had impact on child subject through actions upon a resource. In addition to these three main elements or dimensions of agent, subject, and resource, other common elements or dimensions could be distinguished in the prototypical story sentence. The other dimensions identified related to the social and physical context. Moreover, it often appeared to us that the resources being exchanged had a deeper subjective meaning for the child. A trip to Disneyland was not just for the fun of the rides, but an opportunity to be with Mom and Dad. This interpretation of subjective value appeared to be an important supplement to the description of the resource itself. Thus, a fifth element--subjective need--was

appended to the first four literal elements of agent, resource, social context, and physical context.

A comprehensive scoring system was developed that enabled us to code the child's literal responses into a small number of phenotypic categories for each of the five dimensions. Separate manuals containing category descriptions and representative examples were constructed for each emotion. High interscorer reliability ranging from 80-90% for each emotion across dimensions was obtained with this system.

In our presentation today we will focus on two major analyses of these dimensions. The first analysis deals with a comparison of boys' and girls' response rates. The second deals with a comparison of developmental response trends in the two sexes.

Results

Agents

In Table 1 the frequency breakdowns for agents in the different emotional situation responses are presented. The agent dimension refers to the active or causal figure having direct impact on the child in an emotional situation. Within the agent dimension nine categories were identified. These categories included a varied but familiar range of characters in the child's life such as parents, siblings, peers, adults, teachers, as well as animals and imaginary creatures and the child itself. In some stories no direct reference was made to an agent as, for example, the responses "being in the dark" or "losing a friend." These agentless stories were assigned to an experiential category.

An inspection of Table 1 reflects simultaneously the large number of agents which children report as causing emotional reactions, as well as the unique pattern of agents typifying each of the five individual

emotions. For happiness parents seem to play the most active role, while for anger, peers and siblings dominate as the anger-provoking figures, with parents making children angry to a lesser extent. In the fear stories, strange adults, menacing animals, and imaginary creatures characterize about 60% of the agents. Sadness shows less of a pattern for agents, with parents occupying a fourth of the responses, followed by a range of other figures. Pride is practically agentless, as reflected in the extremely high number (almost 80%) of pride events scored as experiential. This agentless, experiential report of emotional situations is also characteristic of a third of the happy and sad responses. In reviewing the pattern of agents, a few categories--parents, peers, and agentless experiences--share a commonality across emotions. However, the remaining agent categories become salient only for certain emotions.

In terms of this symposium's focus on sex differences and similarities, we find that boys and girls reflect similar patterns in regard to their ascriptions to emotion-arousing agents. Chi square comparisons of overall agent frequencies revealed no significant differences between the sexes for any of the five emotions. Closer examination indicated that significant sex differences did occur in the frequency with which specific categories appeared for a given emotion. These separate chi square analyses indicated that in happy events girls were more parent-oriented than boys. In their sadness and fear descriptions, girls were also more experiential. These sex differences, however, remained within the framework of the more basic similarities in reference to agents.

The limited sex differences obtained with the more general pattern of similarity was also mirrored in the analysis of developmental changes in the use of agents across age groups. In fear, for example, both

sexes manifested a parallel developmental shift from an initial animal and imaginary creature orientation of a set of person-focused categories. For sadness, both sexes shared a rise in the experiential category, an incline that occurred earlier and more sharply in girls. In anger stories a curvilinear rise and fall which peaked in third grade was reflected for both sexes in their mention of children as the eliciting stimulus. A second significant developmental shift in anger occurred in the rise of parents as agents for boys and girls.

Stronger sex differences in developmental patterns were apparent for both happiness and pride. In happiness stories older boys made less ascriptions to parental agents, while the older girls in our sample maintained their frequent reference to parents. Different trends for the two sexes were found for pride, boys' stories showing a developmental rise and fall in experiential descriptions, with girls' stories showing only a small but consistent increase in orientation to teachers.

In reviewing these developmental patterns, it is very difficult to identify basic consistencies across the five emotions. These data suggest that emotions seem to have unique and separate developmental patterns of agents.

Social Context

Somewhat greater consistency of patterns across emotions was obtained in the analysis of the social context dimension. The dimension of social context refers to the total body of individuals mentioned within the child's response. Social context categories include the child alone, the child in agent-self dyads, and the child in wider triadic and group settings. In denoting the complex of individuals present in an event, some insight is gleaned about the dynamic social relations surrounding an emotional situation.

Frequency distributions for social context categories are presented in Table 2. Parent-child interactions in different forms were central emotional settings across all emotions except fear. The interaction between parent and child served as the social backdrop for 25-50% of the situations described, becoming especially prominent for happiness and sadness. Peer and sibling contexts also were consistent across emotions, comprising from 15-30% of the emotional settings, ranking especially high for anger, constituting approximately 70% of the anger responses.

Situations in which the child was alone occurred in about half of the fear, a third of the pride, and one-fifth of the sadness stories. Generally lower frequencies were obtained for solitary self-contexts than for the agentless category in the agent dimension. This indicates that for some emotional events in the child's life, the presence of parent or peer figures may be more important than their actions.

This participatory phenomenon seems to rest behind the stronger appearance of parents and peers as participants--not agents--in pride and happiness contexts.

Sex comparisons of the social context categories reveal only one overall significant difference, that of sadness. Thus, in the sadness stories boys referred significantly more often to dyadic interactions with the parent--26% to the girls' 15%--while girls mentioned parents significantly more often in wider family group interaction, 20% to the boys' 4%. This pattern of sex differences was also found on the more specific category comparisons of social context for the anger and happiness stories. Girls mentioned parents significantly more often in family contexts for happiness, 20% to 8%. Girls also cited anger events involving parents in triadic relations with another child significantly

more often than boys. Overall, girls focused more on relations with parents within wider functional interactions, while boys centered more on the simpler parent-self dyad.

Few clear developmental trends appeared in the contexts dimension. One of note was the significant increasing reference to peers in pride, both boys and girls peaking sharply in the fourth grade. The rise and fall in the boys' citation of parental contexts in happiness was the one significant sex difference in developmental change. This paralleled the previosuly noted developmental trend for boys in regard to mention of parental agents. Overall, few developmental trends were found and when present were similar for boys and girls.

Resources

The clearest sex differences in this study were found in the analysis of the resource dimension. This dimension refers to the variety of physical and psychological resources that were gained or lost by children in the course of the emotional events they described. Identified resource categories ranged from familiar object possessions, to specific experiences--such as passive entertainment, active play, and positive peer interaction, to more general feeling states of physical well being, self-esteem, and parental affection.

The frequency distributions for the resource categories are given in Table 3. The data reveal distinct resource patterns for each emotion. Happiness stories are typified by the receipt of new possessions or opportunities for social play. Pride responses, mainly concerned with accomplishments, were more highly focused on intrinsic feeling states of competence and associated extrinsic rewards of praise and grades.

The negative emotions, all dealing with situations of strong losses, were more similar in the resources they entailed. Fear stories almost exclusively centered on potential physical harm to self. While anger also was typified by reference to physical harm, equally frequent threats to self-esteem and possessions were cited. In sadness occasions, threats to self and property receded and were replaced by reference to loss of parental care and opportunities for social play experiences. The salience of bodily harm and loss of parental affection were prevalent in the negative emotions and served as links between them.

Turning to the sex difference comparisons, we found that boys appeared to be more highly focused on feelings of intrinsic competence following achievement, in comparison to girls. In addition, in contrast to boys, girls more often cited extrinsic praise and grades. A separate analysis of the accomplishments mentioned by the two sexes revealed that girls were significantly more involved in scholastics, while boys were more athletically centered. This differentiation in accomplishments, accentuated with age, may explain the differences in extrinsic and intrinsic references in boys' and girls' descriptions of pride resources.

A consistent finding across emotions was that girls were more socially oriented in their report of resources than boys. In happiness and sadness stories, girls made more frequent reference to play and social interaction than boys. In fear and sadness, girls in contrast to boys stressed the potential loss of parental care and affection. In comparison to the higher social resource orientation in girls, boys displayed a greater object focus. In their happiness, sadness, and anger stories boys made significantly greater reference to objects and possessions as emotionally arousing resources. The consistent sex

differences in social and object resource orientations must be seen, however, against the similarity in resources appearing in the stories for both boys and girls.

Developmentally, the resources involved in the boys' and girls' responses underwent few significant age changes. Age trends for the negative emotions consisted of a rise in the frequency of parental loss and a decline in the frequency of physical harm, an observation paralleled for both sexes. An interesting trend in the positive emotions for boys was the increased appearance of intrinsic competence themes in happiness and pride stories, which may be contrasted with the girls' increasing focus on grades in pride stories.

Subjective Need

Frequency distributions for the subjective need dimensions are presented in Table 4. This dimension deals with a subjective analysis of the deeper psychological needs of the child that are met or thwarted in the reported emotional situation. The categories for subjective needs were derived from Murray's need assessment procedures developed for the Thematic Apperception Test (Murray, 1938). These need categories tap central factors such as need for achievement, harm avoidance, affiliation, and other major personality dimensions.

The frequency data for the subjective need categories complement, to a large degree, the results obtained in the analysis of the resource dimension. Happiness, for example, appeared related to need for possession and pride to need for achievement. The subjective need evaluation articulated in greater detail the distinctive arousal patterns for the negative emotions. Fear events resulted from strong outside threat to the maintenance of one's physical well being. Anger, too, was occasioned

by the external interruption of defensive needs to avoid harm to self, possessions, and self-esteems. Sadness, on the other hand, derived more from frustration of self-initiated attempts to affiliate with others and achieve personal autonomy.

Sex comparisons of the frequency data revealed a higher social need orientation in girls, a result previously noted in the analysis of resource responses. In fear, this was represented by a more frequent appearance of the need for parental succorance in girls' stories. In sadness, girls had higher rates for stories concerning affiliation and nurturance with others. In anger, girls described more occasions involving social humiliation than boys.

In contrast to the appearance of higher social-related drives in girls, boys were more focused on self and extensions of self. In happiness, boys gave greater emphasis to needs for possessions. In sadness, boys had more frequently occurring needs for personal autonomy and achievement. In general, boys conveyed greater interest in self-oriented needs, while girls stressed more socially interdependent ones. Once again these sex differences occurred within an overall framework of similarity in need patterns.

Developmentally, the patterns of needs children cited changed in only two emotions: sadness and anger. In both, boys and girls showed similar declines with age in their mention of stories involving harm to self. This was complemented in anger by the heightened frequency of stories involving need for possession, a similar finding for both boys and girls. A greater social orientation in girls was reflected developmentally, however, in two significant trends in anger and sadness. One was an earlier and sharper rise in stories involving social humiliation

in anger. The second was an earlier and more consistent rise in stories with social affiliative and nurturant themes in sadness. While boys and girls may have displayed the same basic developmental need patterns, these two social trends in anger and sadness reinforce the impression that girls have earlier and more frequent socially related need patterns.

Discussion

In appraising the overall results, it would appear that elementary school boys and girls are highly similar with regard to the events they describe as emotionally arousing. The multidimensional content analyses of the five emotional event descriptions revealed similar patterns in the way boys and girls cited different agents, social contexts, resources, and subjective needs. Also, the developmental changes for the two sexes were highly parallel.

Against this background of overall similarity, some sex differences did appear. Girls were more social and more family-oriented. They included more parental agents, wider familial social contexts, and manifesting more socially related needs and resources. Boys, on the other hand, were more self-oriented, being more preoccupied with possessions, competence and autonomy. While these limited sex difference findings hold true for only certain emotions, they do support previous conceptualizations of differences in personality styles of men and women such as the communal/agency distinction offered by Bakan (1966).

The data, of course, do not provide information on the antecedents for the limited sex differences found in affect-evoking situations. How do different situations acquire their propensity for arousing different emotional reactions in boys and girls? Do the two sexes begin with different affective response tendencies, or are these different patterns

of arousal totally due to differences in opportunity and learning? These questions remain open for further study.

Overall, it is the similarities rather than the differences that characterize the affective reports of boys and girls. The two sexes largely have common emotional patterns. Commonality was also characteristic of the reports across age groups. While we did observe developmental changes, these were not dramatic and in several instances were curvilinear. In fact, the most striking differences that were obtained were between emotions. For example, parents are the main source of children's happiness, while peers are the main source of their anger. Possessing objects makes children happy, but it is the loss of parental care and affection rather than the loss of objects that primarily makes children sad.

It appears from these findings that future research on emotional development should be oriented to the particular agents, social contexts, and resources that characterize the ontogenesis of a particular emotion. The examination of sex differences and similarities in affective development needs to take into account the unique properties of each emotion.

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Table I

Distribution of Agent Responses for Emotions

Agent	Emotions (% Responses)				
	HAPPY	PROUD	ANGRY	SAD	AFRAID
PARENTS	44 g,D	9	21 R	26	8
SIBLINGS	4 D		30 C	8	3
PEERS	8	4	37 C	10	6 R
ADULT			5	8	17 R
TEACHER	4	10 R	4 R		
SELF	6		4	10	6
IMAGINARY					21 D
ANIMAL					22 D
EXPERIENTIAL	31	77 C		31 g	18 g
X^2 analysis of sex differences in distribution of agents	n.s.	n.s.	n.s.	n.s.	n.s.

Note: Blank entries indicate lower than 1% response rate for agent.

g significantly higher response rate in girls for specific agent ($X^2(1)$, $P < .05$)

C significant developmental curvilinear rise and fall in response rate for agent (overall X^2, agent by class level, $P < .05$).

D significant developmental decline in response rate for agent (overall X^2, agent by class level, $P < .05$).

R significant developmental rise in response rate for agent (overall X^2, agent by class level, $P < .05$).

Table II

Distribution of Social Context Responses for Emotions

Context	Emotions (% Responses)				
	HAPPY	PROUD	ANGRY	SAD	AFRAID
PARENT/SELF	26 C	23 C	g	21 b	10
PARENT/CHILD/SELF	5		14 g	7	
FAMILY GROUP/SELF	13 g,C	8		12 g	7
SIBLING/SELF	6		22	10	4
PEER/SELF	13	18 R	45	19	10
ADULT/SELF			6	10	8
TEACHER/SELF	5	5			
GROUP/SELF		15			
OTHER/SELF	15				10
SOLITARY SELF	8	30	4	22	49 b
Analysis of overall sex differences	n.s.	n.s.	n.s.	n.s.	n.s.

Note: Blank entries indicate lower than 1% response rate for context.

b significantly higher response rate in boys for specific context ($X^2(1)$, $P < .05$).

g significantly higher response rate in girls for specific context ($X^2(1)$, $P < .05$).

C significant developmental curvilinear rise and fall in response rate for context (overall X^2, context by class level, $P < .05$).

R significant developmental rise in response rate for context (overall X^2, context by class level, $P < .05$).

Table III

Distribution of Resources Responses for Emotions

Resource	Emotions (% Responses)				
	HAPPY	PROUD	ANGRY	SAD	AFRAID
OBJECTS	35 b	6	27 b	18 b	
ENTERTAINMENT	14 g	5	7	4	
PLAY	15			13	
SOCIAL PARTICIPATION	18	11	7	14 g	
SELF ESTEEM/ COMPETENCE	13 R	38 b,R	25	5	
PRAISE		4			
GRADES		13 g,R			
AWARDS		12			
PHYSICAL WELLBEING			35 D	16 D	84
PARENTAL CARE & AFFECTION				30 g,R	16 g
Analysis of overall sex differences	n.s.	n.s.	n.s.	n.s.	n.s.

b significantly higher response rate in boys for specific resource ($X^2(1)$, $P < .05$).

g significantly higher response rate in girls for specific resource ($X^2(1)$, $P < .05$).

D significant developmental decline in response rate for resource (overall X^2, resource by class level, $P < .05$).

R significant developmental rise in response rate for resource (overall X^2, resource by class level, $P < .05$).

Table IV

Distribution of Subjective Need Responses for Emotions

Need	Emotions (% Responses)				
	HAPPY	PROUD	ANGRY	SAD	AFRAID
HARM AVOIDANCE			33 D	18 D	70
POSSESSION	32 b		18 R	10	
AFFILIATION/ NURTURANCE	11	17	9	33 g,R	8
PLAY	19				
DOMINATION/ AGGRESSION	4		8		
AUTONOMY	4		10	15 b	
ACHIEVEMENT	6	72		10	
RECOGNITION/ EXHIBITION	8	10			
HUMILIATION AVOIDANCE			17		
SUCCORANCE				7	18 g
Analysis of over-all sex differences	n.s.	n.s.	n.s.	n.s.	n.s.

b significantly higher response rate in boys for specific need ($X^2(1), P < .05$)

g significantly higher response rate in girls for specific need ($X^2(1), P < .05$)

D significant developmental decline in response rate for need (overall X^2, need by class level, $P < .05$).

R significant developmental rise in response rate for need (overall X^2, need by class level, $P < .05$).